



Software Quality Engineering

LabTask 04

Name : Muhammad Shamoil
Section : BSSE – V – A
Date: 17th Oct , 2025
Submitted To : Sir Naseer Jan

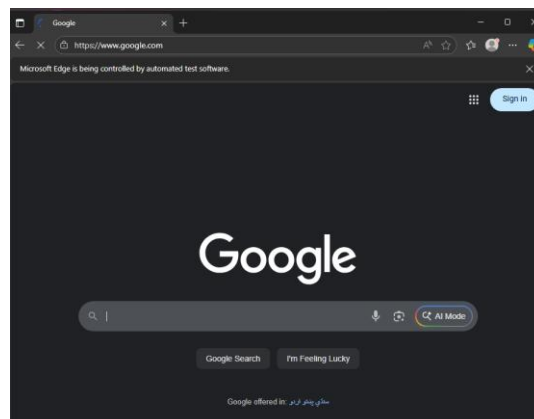
Contents

Task 01	1
Edge	1
Chrome	2
FireFox	2
Task 02	3

Task 01

Edge

```
@ Main.java x
1  import org.openqa.selenium.WebDriver;
2  import org.openqa.selenium.edge.EdgeDriver;
3
4  public class Main {
5      public static void main(String[] args) {
6          System.setProperty("webdriver.edge.driver", "A:\\Academic\\WebDrivers\\edgedriver_win64\\msedgedriver.exe");
7          WebDriver driver = new EdgeDriver();
8          driver.get("https://www.google.com");
9      }
10 }
11
```



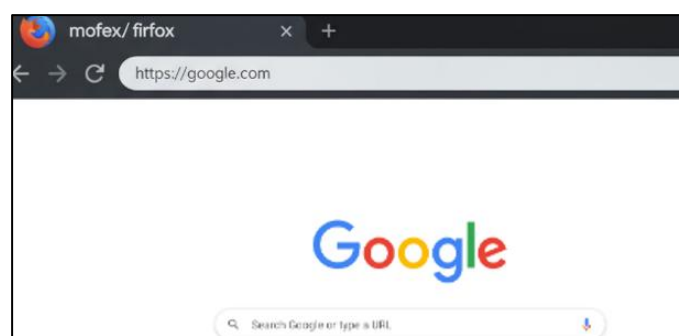
Chrome

```
Main.java x
1  import org.openqa.selenium.WebDriver;
2  import org.openqa.selenium.chrome.ChromeDriver;
3
4  public class Main {
5      public static void main(String[] args) {
6          WebDriver driver = new ChromeDriver();
7          driver.get("https://www.google.com");
8      }
9  }
```



FireFox

```
Main.java x
1  import org.openqa.selenium.WebDriver;
2  import org.openqa.selenium.firefox.FirefoxDriver;
3
4  public class Main {
5      public static void main(String[] args) {
6          WebDriver driver = new FirefoxDriver();
7          driver.get("https://www.google.com");
8      }
9  }
10
```



Task 02

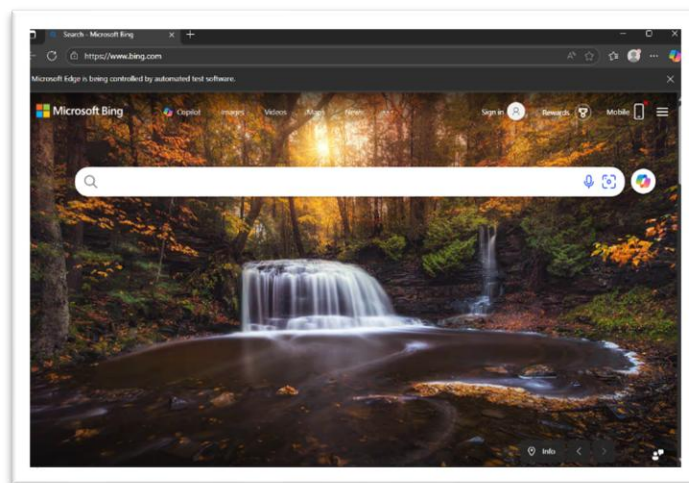
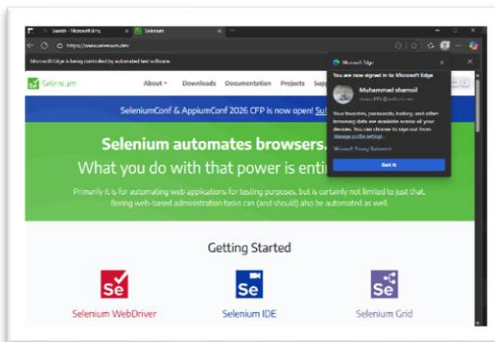
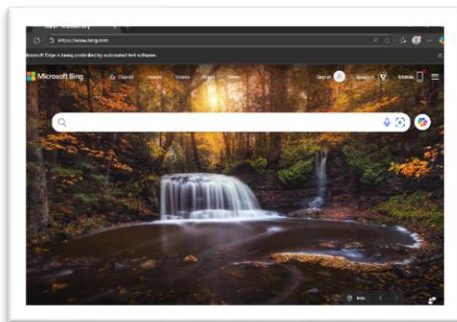
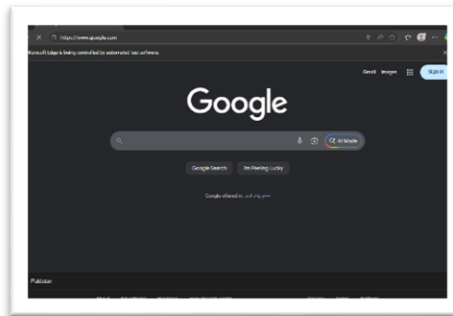
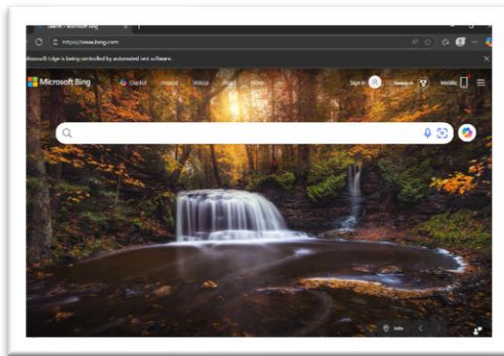
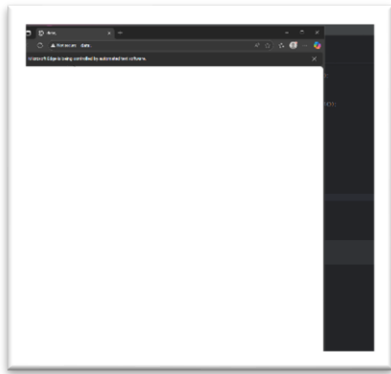
```
1 import org.openqa.selenium.*;
2 import org.openqa.selenium.edge.EdgeDriver;
3
4 import java.util.Set;
5
6 public class Main {
7     public static void main(String[] args) throws InterruptedException {
8         // --- Setup ---
9         // 1. Set the path to your downloaded msedge.exe
10        // IMPORTANT: Replace this path with the actual location of your driver file.
11        System.setProperty("webdriver.edge.driver", "A:\\Academic\\WebDrivers\\edgeDriver_win64\\msedgeDriver.exe");
12
13        // 2. Instantiate the WebDriver for Edge
14        WebDriver driver = new EdgeDriver();
15
16        System.out.println("--- Browser Window Management ---");
17
18        // 3. Manage the browser window
19        driver.manage().window().maximize(); // Maximize the window
20        System.out.println("Window maximized.");
21        Thread.sleep(1500); // Pausing for 1.5 seconds to observe
22
23        driver.manage().window().minimize(); // Minimize the window
24        System.out.println("Window minimized.");
25        Thread.sleep(1500);
26
27        driver.manage().window().maximize(); // Maximize again to continue
28        driver.manage().window().fullScreen(); // Enter fullscreen mode
29        System.out.println("Entered fullscreen mode.");
30        Thread.sleep(1500);
31        driver.manage().window().maximize(); // Exit fullscreen
32
33        // Set a custom window size
34        driver.manage().window().setSize(new Dimension(1200, 800));
35        System.out.println("Window size set to 1200x800.");
36        Thread.sleep(1500);
37
38        System.out.println("\n--- Navigation and Information Retrieval ---");
39
40        // 4. Navigate to a URL
41        // 4. Navigate to a URL
42        driver.get("https://www.google.com");
43        System.out.println("Navigated to Google.");
44
45        // 5. Get browser information
46        System.out.println("Current Page Title: " + driver.getTitle());
47        System.out.println("Current URL: " + driver.getCurrentUrl());
48
49        // 6. Use Navigation commands
50        driver.navigate().to("https://www.bing.com");
51        System.out.println("Navigated to Bing using navigate().to()");
52        Thread.sleep(1500);
53
54        driver.navigate().back(); // Go back to Google
55        System.out.println("Navigated back. Current URL: " + driver.getCurrentUrl());
56        Thread.sleep(1500);
57
58        driver.navigate().forward(); // Go forward to Bing
59        System.out.println("Navigated forward. Current URL: " + driver.getCurrentUrl());
60        Thread.sleep(1500);
61
62        driver.navigate().refresh(); // Refresh the page
63        System.out.println("Page refreshed.");
64        Thread.sleep(1500);
65
66        System.out.println("\n--- Handling Multiple Windows/Tabs ---");
67
68        // 7. Open and switch between tabs
69        String originalWindowHandle = driver.getWindowHandle();
70        driver.switchTo().newWindow(WindowType.TAB); // Open a new tab
71        driver.get("https://www.selenium.dev");
72        System.out.println("Opened new tab. New Title: " + driver.getTitle());
73        Thread.sleep(2000);
74
75        driver.close(); // Close the current (new) tab
76        System.out.println("Closed the new tab.");
77
78        driver.switchTo().window(originalWindowHandle); // Switch back to the first tab
79        System.out.println("Switched back to original tab. Title: " + driver.getTitle());
80        Thread.sleep(1500);
81
82        // --- Teardown ---
83        // 8. Quit the entire browser session
84        driver.quit();
85        System.out.println("Browser session terminated.");
86    }
87 }
```

```
Oct 17, 2025 9:45:30 PM org.openqa.selenium.devtools.CdpVersionFinder findNearestMatch
WARNING: Unable to find an exact match for CDP version 141, returning the closest version; found: 140; Please update to a Selenium version that supports CDP version 141
--- Browser Window Management ---
Window maximized.
Window minimized.
Entered fullscreen mode.
Window size set to 1200x800.

--- Navigation and Information Retrieval ---
Navigated to Google.
Current Page Title: Google
Current URL: https://www.google.com/
Navigated to Bing using navigate().to()
Navigated back. Current URL: https://www.google.com/
Navigated forward. Current URL: https://www.bing.com/
Page refreshed.

--- Handling Multiple Windows/Tabs ---
Opened new tab. New Title: Selenium
Closed the new tab.
Switched back to original tab. Title: Search - Microsoft Bing
Browser session terminated.

Process finished with exit code 0
```



[Window Closed]